# IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS TYLER DIVISION

REEDHYCALOG UK, LTD. and	§	
REEDHYCALOG, LP	§	
	§	
Plaintiffs,	§	
	§	CASE NO. 6:08-CV-325
vs.	§	PATENT CASE
	§	
DIAMOND INNOVATIONS INC.	§	
	§	
Defendant.	§	

#### **COURT'S CHARGE**

#### 1. Introduction

MEMBERS OF THE JURY: You have heard the evidence in this case. I will now instruct you on the law that you must apply. It is your duty to follow the law as I give it to you. On the other hand, you the jury are the judges of the facts. Do not consider any statement that I have made during trial or make in these instructions as an indication that I have any opinion about the facts of this case.

After I instruct you on the law, the attorneys will have an opportunity to make their closing arguments. Statements and arguments of the attorneys are not evidence and are not instructions on the law. They are intended only to assist you in understanding the evidence and the parties' contentions.

Answer each question from the facts as you find them. Do not decide who you think should win and then answer the questions accordingly. Your answers and your verdict must be unanimous.

In determining whether any fact has been proved in this case, you may, unless otherwise instructed, consider the testimony of all witnesses, regardless of who may have called them, and all exhibits received in evidence, regardless of who may have produced them.

### 1.1 Considering witness testimony

You the jurors are the sole judges of the credibility of all witnesses and the weight and effect of all evidence. By the Court allowing testimony or other evidence to be introduced over the objection of an attorney, the Court did not indicate any opinion as to the weight or effect of such evidence.

When the Court sustained an objection to a question addressed to a witness, you must disregard the question entirely, and may draw no inference from the wording of it or speculate as to what the witness would have testified to, if he or she had been permitted to answer the question.

At times during the trial it was necessary for the Court to talk with the lawyers here at the bench out of your hearing, or by calling a recess. We met because often during a trial something comes up that does not involve the jury. You should not speculate on what was discussed during such times.

In determining the weight to give to the testimony of a witness, you should ask yourself whether there was evidence tending to prove that the witness testified falsely concerning some important fact, or whether there was evidence that at some other time the witness said or did something, or failed to say or do something, that was different from the testimony the witness gave before you during the trial.

You should keep in mind, of course, that a simple mistake by a witness does not necessarily mean that the witness was not telling the truth as he or she remembers it, because people may forget some things or remember other things inaccurately. So, if a witness has made a misstatement, you need to consider whether that misstatement was an intentional falsehood or simply an innocent lapse of memory; and the significance of that may depend on whether it has to do with an important fact or with only an unimportant detail.

#### 1.2 How to examine the evidence

Certain testimony in this case has been presented to you through a deposition. A deposition is the sworn, recorded answers to questions asked a witness in advance of the trial. Under some circumstances, if a witness cannot be present to testify from the witness stand, the witness testimony may be presented, under oath, in the form of a deposition. Some time before this trial, attorneys representing the parties in this case questioned this witness under oath. This deposition testimony is entitled to the same consideration and is to be judged by you as to credibility and weight and otherwise considered by you insofar as possible the same as if the witness had been present and had testified from the witness stand in court.

While you should consider only the evidence in this case, you are permitted to draw such reasonable inferences from the testimony and exhibits as you feel are justified in the light of common experience. In other words, you may make deductions and reach conclusions that reason and common sense lead you to draw from the facts that have been established by the testimony and evidence in the case.

Unless you are instructed otherwise, the testimony of a single witness may be sufficient

to prove any fact, even if a greater number of witnesses may have testified to the contrary, if after considering all the other evidence you believe that single witness.

There are two types of evidence that you may consider in properly finding the truth as to the facts in the case. One is direct evidence such as testimony of an eyewitness. The other is indirect or circumstantial evidence – the proof of a chain of circumstances that indicates the existence or nonexistence of certain other facts. As a general rule, the law makes no distinction between direct and circumstantial evidence, but simply requires that you find the facts from a preponderance of all the evidence, both direct and circumstantial.

# 1.3 Expert witness

When knowledge of a technical subject matter may be helpful to the jury, a person who has special training or experience in that technical field is called an expert witness and is permitted to state his or her opinion on those technical matters. However, you are not required to accept that opinion. As with any other witness, it is up to you to decide whether to rely upon it.

In deciding whether to accept or rely upon the opinion of an expert witness, you may consider any bias of the witness, including any bias you may infer from evidence that the expert witness has been or will be paid for reviewing the case and testifying, or from evidence that he or she testifies regularly as an expert witness and that income from such testimony represents a significant portion of the expert's income.

### 2. Stipulations

The parties have agreed, or stipulated to certain facts. This means that both sides agree with these facts. You must therefore treat these facts as having been proved. These are listed in

## Appendix A.

# 3. Summary of Contentions

I will first give you a summary of each side's contentions in this case. I will then tell you what each side must prove to win on these issues.

## 3.1 ReedHycalog's Contentions

The ReedHycalog contends that DI directly infringes the following claims of the ReedHycalog Patents:

```
claims 1, 4, and 7 of the '137 Patent;
claim 1 of the '098 Patent;
claim 1 of the '447 Patent;
claims 1, 2, 4, 7, 26, 31, and 32 of the '662 Patent;
claim 1 of the '640 Patent;
claim 4 of the '033 Patent;
claims 1 and 2 of the '326 Patent;
claims 1 and 6 of the '308 Patent; and
claims 1, 3, and 7 of the '462 Patent.
```

I will refer, collectively, to all of these claims of the ReedHycalog Patents as the "Asserted Claims" of those patents.

ReedHycalog contends that DI's infringement of the ReedHycalog Patents has been willful.

### 3.2 Diamond Innovations' Contentions

DI denies that it has infringed the Asserted Claims of the ReedHycalog Patents. In addition, DI contends that the Asserted Claims of the ReedHycalog Patents are invalid on the ground of anticipation. DI denies that it has willfully infringed the Asserted Claims of the ReedHycalog Patents.

## 3.3 Burdens of Proof

As I told you at the beginning of the trial, in any legal action, facts must be proved by a required amount of evidence, known as the "burden of proof." In a patent case such as this, there are two different burdens of proof that are used. The first is the "preponderance of the evidence" standard and the second is the "clear and convincing" standard.

The "preponderance of the evidence" standard means that the evidence persuades you that a claim is more likely true than not true.

The "clear and convincing standard" means that the evidence produces in your mind a firm belief or conviction as to the matter at issue. The clear and convincing evidence standard requires greater proof than is necessary for the preponderance of the evidence standard.

ReedHycalog has the burden of proving infringement by a preponderance of the evidence. In determining whether any fact has been proved by a preponderance of the evidence, you may, unless otherwise instructed, consider the stipulations, the testimony of all witnesses regardless of who may have called them, and all exhibits received in evidence regardless of who may have produced them. If the proof establishes that all essential parts of ReedHycalog's infringement claim are more likely true than not true, then you should find for ReedHycalog as to that claim.

If you find that DI infringed one or more of ReedHycalog's Asserted Claims, then ReedHycalog has the burden of proving its additional contention that the infringement was willful by clear and convincing evidence. The clear and convincing evidence standard requires a greater degree of proof than is necessary for the preponderance of the evidence standard. The proof must establish a firm belief or conviction in your mind that DI's infringement was willful for you to find for ReedHycalog as to the willful infringement issue.

As issued United States patents, the ReedHycalog Patents are presumed to be valid. DI has

the burden of overcoming that presumption and proving invalidity of the ReedHycalog Patents by clear and convincing evidence. In determining whether any fact has been proved by clear and convincing evidence, you may, unless otherwise instructed, consider stipulations, the testimony of all witnesses regardless of who may have called them, and all exhibits received in evidence regardless of who may have produced them. The clear and convincing evidence standard requires a greater degree of proof than is necessary for the preponderance of the evidence standard. The proof must establish a firm belief or conviction in your mind that DI's invalidity claims are correct, for you to find for them that the ReedHycalog Patents are invalid.

#### 3.4 Glossary of Patent Terms

A glossary of patent terms is contained in Appendix B to this Charge.

### 4. Patent Claims

At the beginning of the trial, I gave you some general information about patents and the patent system and a brief overview of the patent laws relevant to this case. I will now give you more detailed instructions about the patent laws that specifically relate to this case. If you would like to review my instructions at any time during your deliberations, they will be available to you in the jury room.

The claims of a patent are the numbered sentences at the end of the patent. The claims describe the invention made by the inventor and describe what the patent owner owns and what the patent owner may prevent others from doing. Claims may describe methods, products, such as machines or chemical compounds, or processes for making or using a product. In this case, ReedHycalog has asserted product and method claims from the ReedHycalog Patents.

Claims are usually divided into parts or steps, called "limitations" or "elements." For

example, a claim that covers the invention of a table may recite the tabletop, four legs, and the glue that secures the legs to the tabletop. In this example, the tabletop, legs, and glue is each a separate limitation of the claim.

## 4.1 Independent and Dependent Claims

This case involves two types of patent claims: independent claims and dependent claims.

An "independent claim" sets forth all of the requirements that must be met in order to be covered by that claim. Thus, it is not necessary to look at any other claim to determine what an independent claim covers. Claims 1, 26, and 31 of the '662 patent, for example, are independent claims.

The other claims being asserted in this case are "dependent claims." A dependent claim does not itself recite all of the requirements of the claim but refers to another claim for some of its requirements. In this way the claim "depends" on another claim. The law considers a dependent claim to incorporate all of the requirements of the claims to which it refers. The dependent claim then adds its own, additional requirements. To determine what a dependent claim covers, it is necessary to look at both the dependent claim any other claims to which it refers. A product or method that meets all of the requirements of both the dependent claim and the claims to which it refers is covered by that dependent claim. For example, claim 4 of the '662 patent is a dependent claim that refers back to independent claim 1, whereas claim 30 of the '662 patent refers back to independent claim 26.

#### 4.2 Construction of the Claims

In deciding whether or not an accused method or product infringes a patent, the first step is to understand the meaning of the words used in the patent claims.

It is my job as Judge to determine what the patent claims mean and to instruct you about that meaning. You must accept the meanings I give you and use those meaning when you decide whether or not the patent claims are infringed, and whether or not they are invalid. I have interpreted the meaning of some of the language in the patent claims involved in this case. My interpretation of those claims appear in Appendix C to this charge. The claim language I have not interpreted for you in Appendix C is to be given its ordinary and accustomed meaning as understood by one of ordinary skill in the art.

# 5. Infringement

Any person or business entity that, without the patent owner's permission, makes, uses, sells, or offers to sell a device, or practices a method, that is covered by at least one claim of a patent, before the patent expires, infringes the patent. A patent owner has the right to stop others from infringing the patent claims during the life of the patent.

In this case, ReedHycalog asserts that DI has infringed various claims of nine of the ReedHycalog Patents. ReedHycalog has the burden of proving infringement by a preponderance of the evidence.

Only the claims of a patent can be infringed. You must compare each of the asserted patent claims, as I have defined them, to the accused products and methods of DI, and determine whether or not there is infringement. You should not compare DI's accused products and methods with any specific example set out in the ReedHycalog Patents. The only correct comparison is with the

language of the claim itself, with the meaning I have given you.

In order to prove infringement, ReedHycalog must prove that the requirements for one or more of these types of infringement are met by a preponderance of the evidence, i.e., that it is more likely than not that all of the requirements of one or more of each of these types of infringement has been proved.

You must consider each claim individually and must reach your decision as to each assertion of infringement based on my instructions about the meaning and scope of the claims, the legal requirements for infringement, and the evidence presented to you by the parties.

In this case, ReedHycalog has alleged that DI directly infringes the Asserted Claims. I will now explain direct infringement in more detail.

# 5.1 Direct Infringement

If any person or company makes, uses, sells, offers to sell, or imports into the United States what is covered by one or more of the claims of a patent without the patent owner's permission, that person is said to infringe the patent. This type of infringement is called "direct infringement."

To determine direct infringement, you must compare the accused product or method with each of the Asserted Claims that ReedHycalog contends is infringed, using my instructions as to the meaning of the patent claims.

A patent claim is directly infringed only if the accused product or method includes each and every element in that patent claim. If the accused product or method does not contain one or more of the limitations recited in a claim, then that product or method does not directly infringe that claim. If you find that the accused product or method includes each element or step of the claim, then that product or method infringes the claim even if such product or method contains additional elements

or steps that are not recited in the claim. Practicing what is in the prior art is not a defense to infringement.

A person can directly infringe a patent without knowing that what it is doing is an infringement of the patent. It may also directly infringe even though in good faith it believes that what it is doing is not an infringement of any patent and even if it did not know of the patent. Infringement does not require proof that the person copied a product or the patent.

You must consider each of the Asserted Claims of the ReedHycalog Patents individually, and decide whether the accused DI product or method infringes that claim. You must be certain to compare DI's accused products and methods with each claim that is alleged to infringe. Such accused apparatus or method should be compared to the limitations recited in the Asserted Claims, not to any preferred or commercial embodiment of the claimed invention.

Taking each claim of the patents separately, if you find that ReedHycalog has proved by a preponderance of the evidence that each and every limitation of that claim is present in any of the accused products or methods, then you must find that such products or methods infringe that claim.

A claim limitation may be directly infringed if it exists in the accused product or method just as it is described in the claim language, either as I have explained that language to you or, if I did not explain it, as it would be understood by one of skill in the art.

# 5.2 Willful Infringement

ReedHycalog contends that DI willfully infringed the Asserted Claims of the ReedHycalog Patents. If you find by a preponderance of the evidence that DI infringes at least one asserted claim of the ReedHycalog Patents, then you must decide for that patent whether or not DI's infringement was willful. However, willfulness is not relevant to your decision of whether or not there is

## infringement.

To prove willfulness, a patent owner must prove by clear and convincing evidence that the accused infringer:

- (1) was aware of ReedHycalog's Patents,
- (2) acted despite an objectively high likelihood that its actions infringed a valid patent, and
- (3) this objectively high likelihood of infringement was either known or so obvious that it should have been known to the accused infringer.

In deciding whether or not the alleged infringer committed willful infringement, you must consider all of the facts, including:

- (1) whether or not the alleged infringer possessed a reasonable basis to believe that it has a substantial defense to infringement and reasonably believed that the defense would be successful if litigated, including the defense that the patent is invalid; and
- (2) whether or not the alleged infringer made a good faith effort to avoid infringing the patent, for example the alleged infringer took remedial action upon learning of the patent by ceasing infringing activity or attempting to design around the patent.
- (3) whether or not the alleged infringer did not act with an objectively high likelihood that its actions infringed a valid patent because it relied on a legal opinion or as DI has referred to as its "right to practice" that advised it either (1) that the products did not infringe the patents-in-suit or (2) that the patents-in-suit were invalid or unenforceable. You must evaluate whether the opinion was of a quality that reliance on its conclusions was reasonable.

### 6. Invalidity

DI has challenged the validity of the Asserted Claims of all nine of the ReedHycalog Patents on the ground of anticipation. DI must prove that a patent claim is invalid by clear and convincing evidence. Because the United States Patent and Trademark Office is presumed to have acted correctly in issuing a patent, an issued patent is accorded a presumption of validity that can only be

overcome by clear and convincing evidence of invalidity.

For a patent to be valid, the invention claimed in the patent must be new and useful. A patent cannot take away from people their right to use what was known when the invention was made.

In making your determination as to invalidity, you should consider each patent claim and each ground for invalidity separately.

#### 6.1 Prior Art

Before explaining to you each of DI's grounds for invalidity in detail, I will discuss the concept of "prior art."

#### 6.1.1 Prior Art

DI is relying on the Bovenkerk/Gigl Patent that it contends is prior art. DI must prove by clear and convincing evidence that the reference on which it relies is, in fact, prior art. To do so, DI must prove that the reference falls within one or more of the different categories of prior art recognized by the patent laws. The category of relevance in this case is: anything that was patented or described in a printed publication anywhere in the world before the inventor made the invention, or more than one year before the application for the patent was filed.

DI must also prove that the prior art was complete enough to enable one of ordinary skill in the art to practice the claimed invention without undue experimentation.

## **6.1.2** Date of Invention/Filing Date

Whether or not something is prior art depends on whether it was in public use or sale or described in a printed publication more than one year before the patent application was filed. The effective filing date of the ReedHycalog patents is September 20, 2000, so you should only consider prior art that existed before September 20, 1999.

I will now describe the specific requirements for the prior art categories relied on by DI.

## **6.1.3** Corroboration of Oral Testimony

Oral testimony alone is insufficient to prove an alleged prior invention or that something is prior art. A party seeking to prove prior invention or prior art also must provide evidence that corroborates any oral testimony, especially where the oral testimony comes from an interested witness, or a witness testifying on behalf of an interested party. This includes any individual or company testifying that his or its invention predates the patents-in-suit. Documentary or physical evidence that is made contemporaneously with the inventive process provides the most reliable proof that the alleged prior art inventor's testimony has been corroborated. For any oral testimony that a party has put forth, that party must also have provided some sort of corroborating evidence that agrees with that oral testimony. If you find that the party has not corroborated the oral testimony with other evidence, you are not permitted to find that the subject of that oral testimony qualifies as prior art or supports a prior date of invention.

If evidence is presented for purposes of attempting to corroborate oral testimony, then you must determine whether this evidence does, in fact, properly corroborate the oral testimony. In making this determination, you should consider the following factors:

(1) The relationship between the corroborating witness and the alleged prior user;

- (2) The time period between the event and this trial;
- (3) The interest of the corroborating witness in the subject matter of this suit;
- (4) Contradiction or impeachment of the witness's testimony;
- (5) Extent and detail of the corroborating witness's testimony;
- (6) The witness's familiarity with the subject matter of the patented invention and the alleged prior use;
- (7) Probability that a prior use could occur considering the state of the art at the time; and
- (8) Impact of the invention on the industry, and the commercial value of its practice.

## 6.2 Anticipation

I will now describe DI's grounds for invalidity in detail and the specific requirements for the prior art categories relied on by DI in this case.

# **6.2.1** Anticipation for Lack of Novelty

A patent claim is invalid if the claimed invention is not new. For a claim to be invalid on the basis of anticipation because it is not new, all of its requirements must be present in a single previous device or method, or described in a single previous publication or patent. The description in a reference does not have to be in the same words as the claim, but all the requirements of the claim must be there, either stated expressly or necessarily implied or inherent in the level of ordinary skill in the field of technology of the patent, so that someone of ordinary skill in the field of technology of the patent looking at that one reference would be able to make and use the claimed invention. Something is inherent in an item of prior art if it is always present in the prior art or always results from the practice of the prior art. Inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may coincidentally result from a given set of circumstances is not

sufficient. A party claiming anticipation by inherency must show that the elements of the claim are always present in the prior art or always result from the practice of the prior art. You may not combine two or more items of prior art to make out an anticipation.

I will now explain in more detail what DI contends is "prior art" as well as its burden in proving that a piece of evidence is "prior art."

# **6.2.2** Anticipation by Prior Patent

A claim in a patent is invalid if the invention defined by that claim was patented in the United States or a foreign country before it was invented by the inventor of the patent-in-suit or more than one year before the inventor patentee filed his United States patent application.

What was "patented" in the prior patent is determined by what is defined by the prior patent's claims, interpreted in the light of the general description contained in the prior patent. To show anticipation of the patented invention, DI must show by clear and convincing evidence that the prior patent disclosed all of the elements of each claim of the patent that DI contends is invalid. The disclosure must be complete enough to enable one of ordinary skill in the art to practice the invention without undue experimentation. Factors to be considered in determining whether a disclosure would require undue experimentation include: (1) the quantity of experimentation necessary; (2) the amount of direction or guidance disclosed in the printed publication or patent; (3) the presence or absence of working examples in the printed publication or patent; (4) the nature of the invention; (5) the state of the prior art; (6) the relative skill of those in the art; (7) the predictability of the art; and (8) the breadth of the claims. A prior patent is presumed to enable one of ordinary skill in the art to practice the invention without undue experimentation.

DI asserts that Bovenkerk-Gigl Patent (U.S. Patent No. 4,224,380) was patented more than

one year prior to the effective filing of the applications for the ReedHycalog Patents, and is enabled.

DI asserts that this patent anticipates the Asserted Claims of the ReedHycalog Patents.

Anticipation may not be proved by merely establishing that a person "practices the prior art."

### 6. Instructions for Deliberations

You must perform your duties as jurors without bias or prejudice as to any party. The law does not permit you to be controlled by sympathy, prejudice, or public opinion. All parties expect that you will carefully and impartially consider all the evidence, follow the law as it is now being given to you, and reach a just verdict, regardless of the consequences.

It is your sworn duty as jurors to discuss the case with one another in an effort to reach agreement if you can do so. Each of you must decide the case for yourself, but only after full consideration of the evidence with the other members of the jury. While you are discussing the case, do not hesitate to re-examine your own opinion and change your mind if you become convinced that you are wrong. However, do not give up your honest beliefs solely because the others think differently, or merely to finish the case.

Remember that in a very real way you are the judges—judges of the facts. Your only interest is to seek the truth from the evidence in the case.

You should consider and decide this case as a dispute between persons of equal standing in the community, of equal worth, and holding the same or similar stations in life. A corporation is entitled to the same fair trial as a private individual. All persons, including corporations, and other organizations stand equal before the law, regardless of size or who owns them, and are to be treated as equals.

When you retire to the jury room to deliberate on your verdict, you may take this charge with

you as well as exhibits which the Court has admitted into evidence. Select your Foreperson and conduct your deliberations. If you recess during your deliberations, follow all of the instructions that the Court has given you about your conduct during the trial. After you have reached your unanimous verdict, your Foreperson is to fill in on the form your answers to the questions. Do not reveal your answers until such time as you are discharged, unless otherwise directed by me. You must never disclose to anyone, not even to me, your numerical division on any question.

Any notes that you have taken during this trial are only aids to memory. If your memory should differ from your notes, then you should rely on your memory and not on the notes. The notes are not evidence. A juror who has not taken notes should rely on his or her independent recollection of the evidence and should not be unduly influenced by the notes of other jurors. Notes are not entitled to any greater weight than the recollection or impression of each juror about the testimony. If you want to communicate with me at any time, please give a written message or question to the bailiff, who will bring it to me. I will then respond as promptly as possible either in writing or by having you brought into the courtroom so that I can address you orally. I will always first disclose to the attorneys your question and my response before I answer your question.

After you have reached a verdict, you are not required to talk with anyone about the case unless the Court orders otherwise. You may now retire to the jury room to deliberate.

#### APPENDIX A

#### **STIPULATIONS**

- 1. ReedHycalog UK, Ltd. and ReedHycalog, LP (collectively "ReedHycalog") are Plaintiffs in this suit.
- 2. Diamond Innovations, Inc. ("DI") is the Defendant in this suit.
- 3. The Bovenkerk-Gigl Patent (U.S. Patent No. 4,224,380) was filed on March 28, 1978, and issued on September 23, 1980.
- 4. ReedHycalog UK, Ltd. is the owner by assignment of U.S. Patent No. 6,878,447, which was filed on June 20, 2003, and issued on April 12, 2005, and claims priority to U.S. provisional application no. 60/234,075, filed September 20, 2000, and U.S. provisional application no. 60/682,042, filed April 2, 2001.
- 5. ReedHycalog UK, Ltd. is the owner by assignment of U.S. Patent No. 6,861,137, which was filed on July 1, 2003, and issued on March 1, 2005, and claims priority to U.S. provisional application no. 60/234,075, filed September 20, 2000, and U.S. provisional application no. 60/682,042, filed April 2, 2001.
- 6. ReedHycalog UK, Ltd. is the owner by assignment of U.S. Patent No. 6,861,098, which was filed on October 1, 2003, and issued on March 1, 2005, and claims priority to U.S. provisional application no. 60/234,075, filed September 20, 2000, and U.S. provisional application no. 60/682,042, filed April 2, 2001.
- 7. ReedHycalog UK, Ltd. is the owner by assignment of U.S. Patent No. 6,601,662, which was filed on September 6, 2001, and issued on August 5, 2003, and claims priority to U.S. provisional application no. 60/234,075, filed September 20, 2000, and U.S. provisional application no. 60/682,042, filed April 2, 2001.
- 8. ReedHycalog UK, Ltd. is the owner by assignment of U.S. Patent No. 6,544,308, which was filed on August 30, 2001, and issued on April 8, 2003, and claims priority to U.S. provisional application no. 60/234,075, filed September 20, 2000, and U.S. provisional application no. 60/682,042, filed April 2, 2001.
- 9. ReedHycalog UK, Ltd. is the owner by assignment of U.S. Patent No. 6,562,462, which was filed on December 20, 2001, and issued on May 13, 2003, and claims priority to U.S. provisional application no. 60/234,075, filed September 20, 2000, and U.S. provisional application no. 60/682,042, filed April 2, 2001.
- 10. ReedHycalog UK, Ltd. is the owner by assignment of U.S. Patent No. 6,797,326, which was

- filed on October 9, 2002, and issued on September 28, 2004, and claims priority to U.S. provisional application no. 60/234,075, filed September 20, 2000, and U.S. provisional application no. 60/682,042, filed April 2, 2001.
- 11. ReedHycalog UK, Ltd. is the owner by assignment of U.S. Patent No. 6,589,640, which was filed on November 1, 2002, and issued on July 8, 2003, and claims priority to U.S. provisional application no. 60/234,075, filed September 20, 2000, and U.S. provisional application no. 60/682,042, filed April 2, 2001.
- 12. ReedHycalog UK, Ltd. is the owner by assignment of U.S. Patent No. 6,749,033, which was filed on November 1, 2002, and issued on June 15, 2004, and claims priority to U.S. provisional application no. 60/234,075, filed September 20, 2000, and U.S. provisional application no. 60/682,042, filed April 2, 2001.
- 13. Together, these nine patents are referred to as the "ReedHycalog Patents" or the "patents-insuit."
- 14. The asserted claims of the '137 Patent are claims 1, 4, and 7.
- 15. The asserted claim of the '447 Patent is claim 1.
- 16. The asserted claim of the '098 Patent is claim 1.
- 17. The asserted claims of the '662 Patent are claims 1, 2, 4, 7, 26, 31, and 32.
- 18. The asserted claims of the '308 Patent are claims 1 and 6.
- 19. The asserted claim of the '640 Patent is claim 1.
- 20. The asserted claims of the '462 Patent are claims 1, 3, and 7.
- 21. The asserted claims of the '326 Patent are claims 1 and 2.
- 22. The asserted claim of the '033 Patent is claim 4.
- 23. DI manufactures partially leached polycrystalline diamond ("PCD") elements and sells such partially leached PCD elements to various end users.
- 24. The Bovenkerk-Gigl Patent (U.S. Patent No. 4,224,380) is listed under "References Cited" on all of the ReedHycalog Patents.
- 25. A person of ordinary skill in the art would have at least a bachelor's degree in an appropriate engineering or science field (equivalent relevant work experience may also be

acceptable), such as mechanical engineering, material science, or the like, and at least five years of work experience related to the design, manufacturing and use of PCD materials.

#### APPENDIX B

### **GLOSSARY OF PATENT TERMS**

- <u>Application</u> The initial papers filed by the applicant in the United States Patent and Trademark Office (also called the Patent Office or PTO).
- <u>Claims</u> Claims are the numbered sentences appearing at the end of the patent that define the invention. The words of the claims define the scope of the patent owner's exclusive rights during the life of the patent.
- <u>Comprising</u> The beginning, or preamble, portion of each of the asserted independent claims uses the word "comprising." "Comprising" means "including" or "containing." A claim that uses the word "comprising" is not limited to products or methods having only the elements that are recited in the claim limitations, but also covers products or methods that have all of the elements and add additional elements without changing the required limitations.

Take as an example a claim that covers a table. If the claim recites a table "comprising" a tabletop, legs, and glue, the claim will cover any table that contains these structures, even if the table also contains other structures, such as a leaf or wheels on the legs. However, if a table contains a tabletop, legs, but no glue, then the claim does not cover the table.

- <u>File wrapper</u> See "prosecution history" below.
- <u>License</u> Permission to use the patented invention(s), which may be granted by a patent owner (or a prior licensee) in exchange for a fee called a "royalty" or other compensation.
- Office action Communication from the patent examiner regarding the specification (See definition on next page) and/or the claims in the patent application.
- Ordinary skill in the art From time to time in these instructions I will refer to a hypothetical person of "ordinary skill in the art." This hypothetical person is presumed to be aware of all of the prior art and knowledge that existed in the field during the relevant time period. The skill of the actual inventor and experts is irrelevant, because they may possess something that distinguishes them from workers of ordinary skill in the art.
- <u>Patent Examiners</u> Personnel employed by the United States Patent and Trademark Office who review (examine) the patent applications, each in a specific technical area, to determine whether the claims of a patent application are patentable and whether the disclosure adequately describes the invention.
- <u>Prior Art</u> Except as limited by prior-art instructions contained later in these instructions, knowledge that is available to the public either prior to the invention by the applicant or more

than a year prior to the effective filing date of his/her patent application.

<u>Prosecution history</u> – The prosecution history is the written record of proceedings in the United States Patent and Trademark Office between the applicant and the PTO. It includes the original patent application and later communications between the PTO and the applicant. The prosecution history may also be referred to as the "File History" or "File Wrapper" of the patent during the course of this trial.

<u>References</u> – Any item of prior art used to determine patentability.

<u>Said</u> – Patent claims may use the word "said" instead of "the." Use of the word "said" in the beginning of a phrase indicates that it is referring to a previous use of the same or a similar phrase.

Specification – The specification is the information, which appears in the patent and concludes with one or more claims. The specification includes the written text, the claims, and the drawings. In the specification, the inventor sets forth a description of the invention, how it works, and how to make and use it so as to enable others skilled in the art to do so.

# APPENDIX C

# **CLAIM CONSTRUCTION CHART**

bonded diamonds	<ol> <li>For the '447 Patent, '098 Patent, '137 Patent, '308 Patent, '462 Patent, '326 Patent, '640 Patent, and '033 Patent:         <ul> <li>a plurality of diamond crystals joined together</li> </ul> </li> <li>For the '662 Patent:         <ul> <li>a plurality of diamond or diamond-like materials joined together</li> </ul> </li> </ol>
substantially free	free of most, but not all, of the catalyzing material
catalyzing material	a material used to help form bonds between adjacent crystals during the formation of the body of bonded diamonds
working surface	<ol> <li>For the '447 Patent, '098 Patent, '137 Patent, '308 Patent, '462 Patent, '326 Patent, '640 Patent, and '033 Patent:         <ul> <li>any portion of the PCD body which, in operation, may contact the object to be worked</li> </ul> </li> <li>For the '662 Patent:         <ul> <li>any portion of the PCD body which, in operation, may contact the object to be worked; where 'PCD' means polycrystalline diamond or diamond-like elements</li> </ul> </li> </ol>
impact strength	resistance to impact
integrally formed with a metal substrate	formed as a unit with a metallic base